

FIG. 1A

FIG. 1A
FIG. 1B

Aptamer Selection

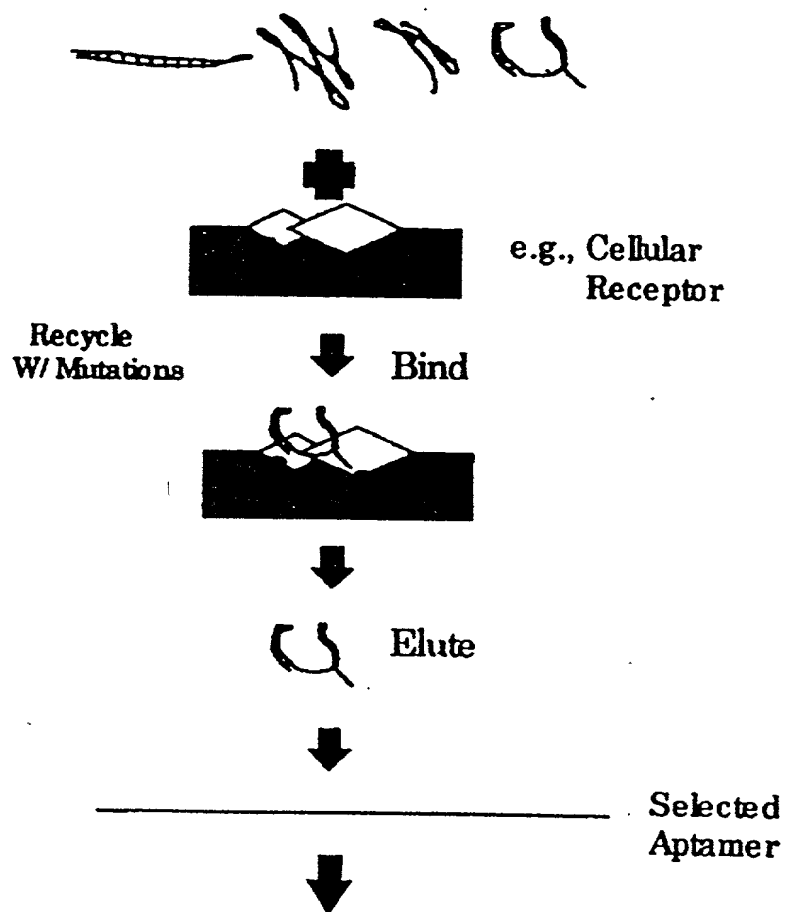


FIG. 1B

Aptamer Generation

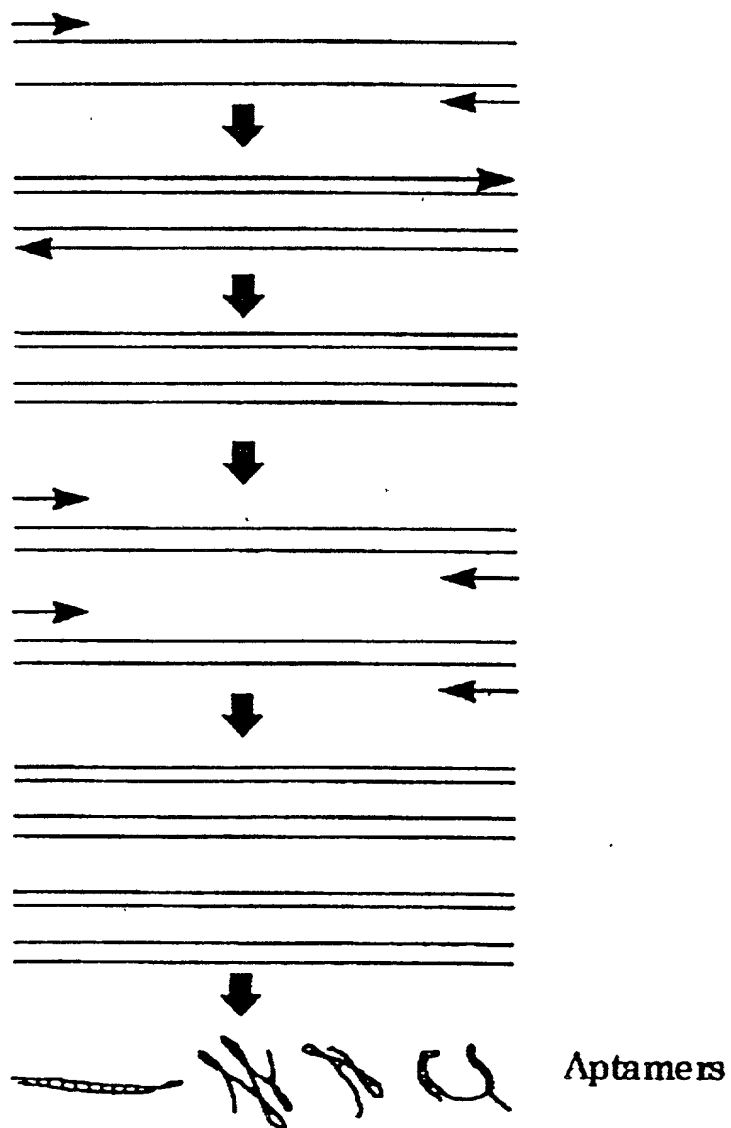
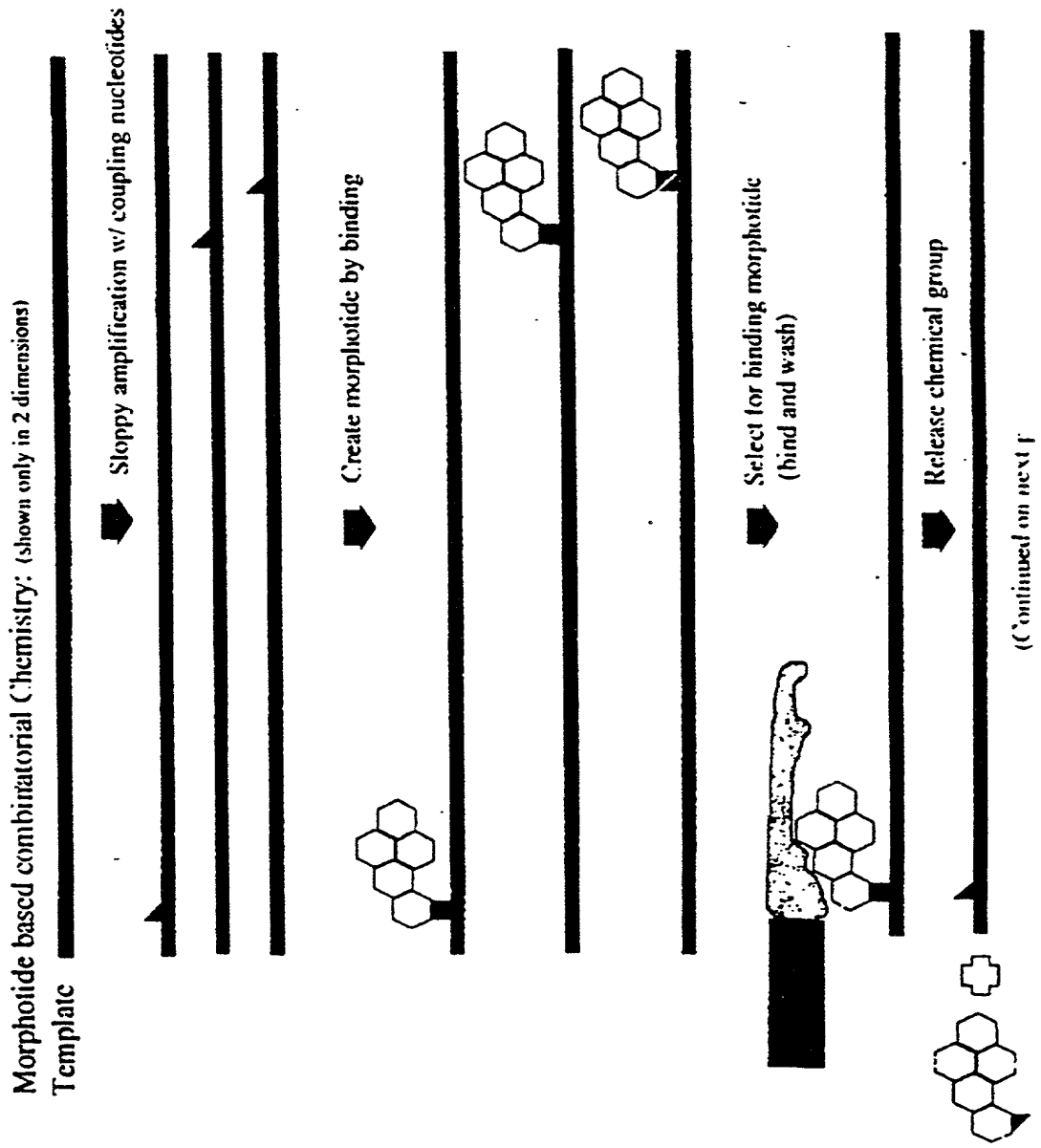


FIG. 2A

FIG. 2A
FIG. 2B



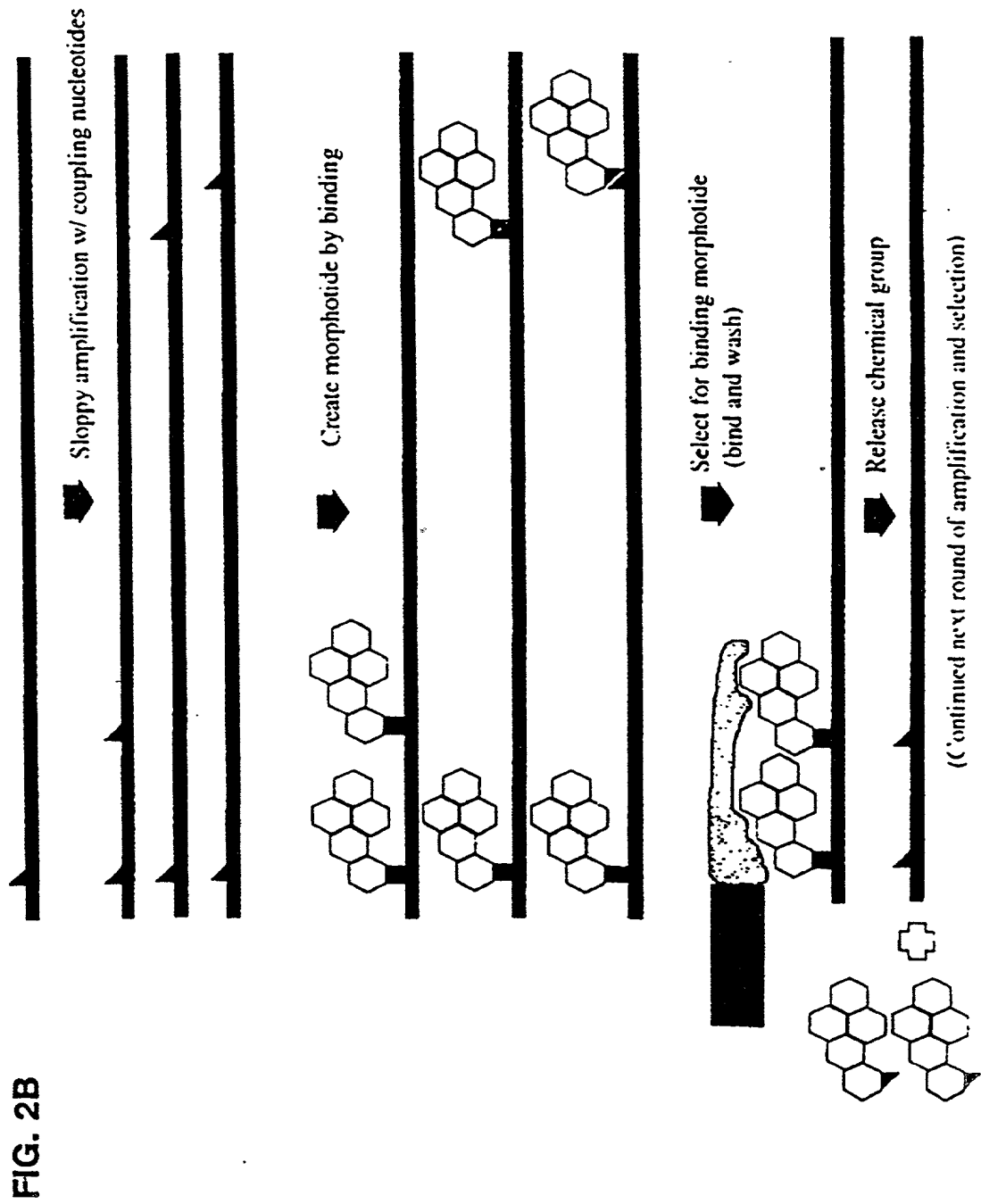
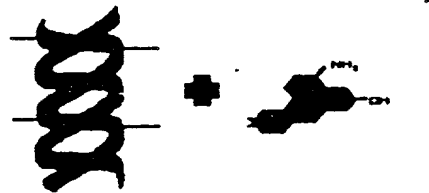


FIG. 3A

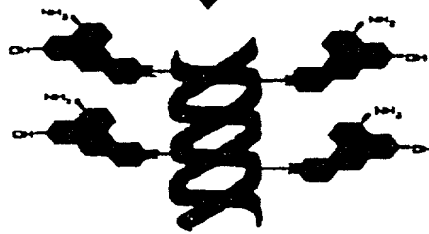
FIG. 3A FIG. 3B

Reversible Coupler

Shape & Structure Library



Coupling Step



Bind

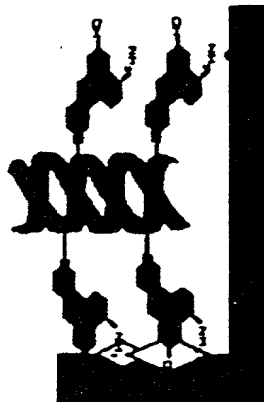
Elute w/
pH ShiftPCR
Mutate

FIG. 3B

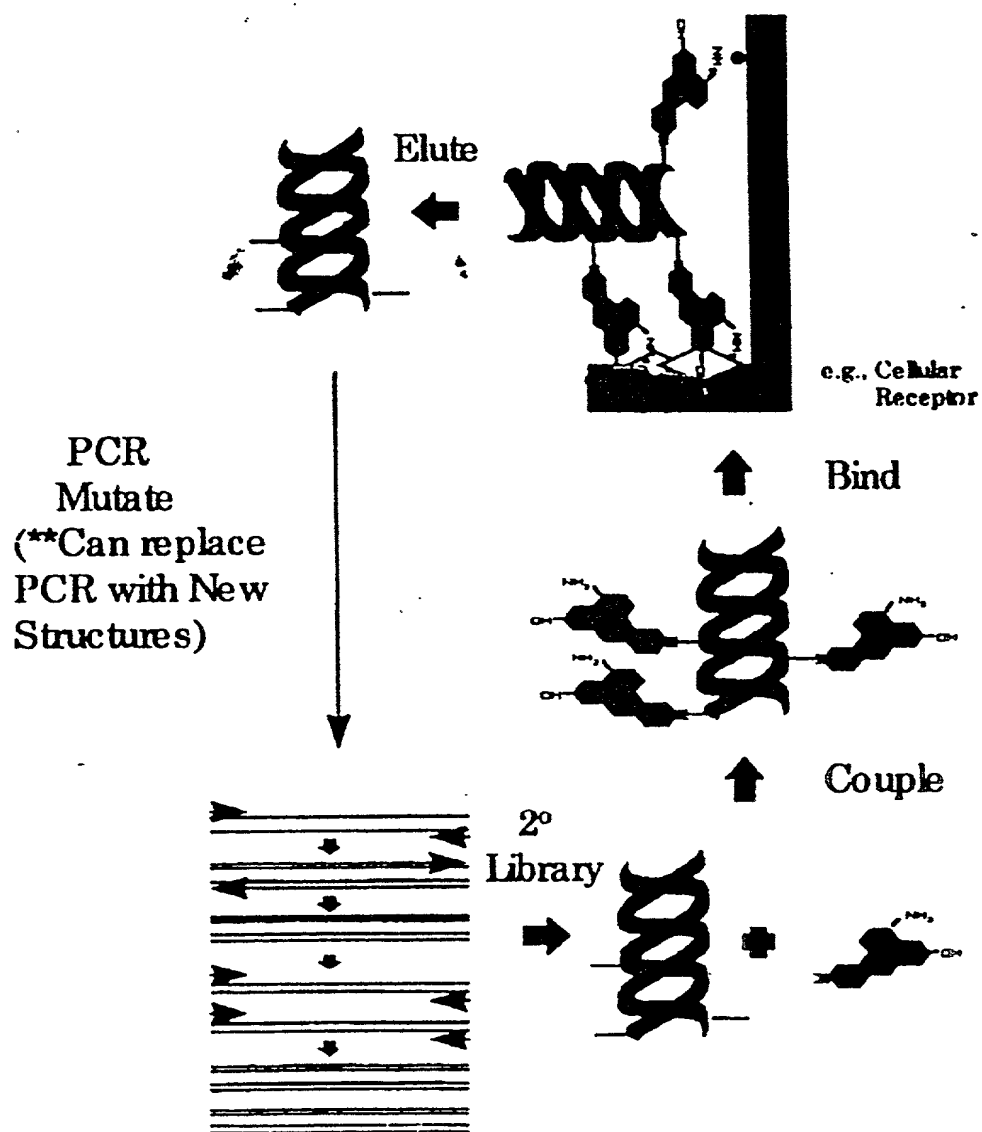
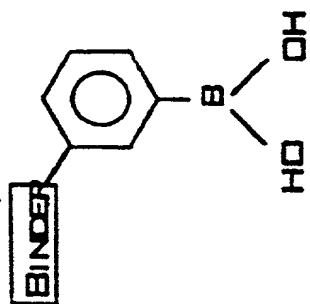


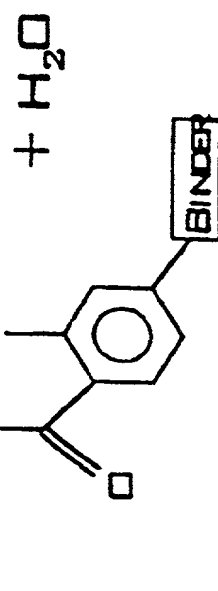
FIG. 4

Candidate bioconjugate:
Phenylboronic Acid

↓ STD. CHEMISTRY COUPLING TO ATTACH



CONDENSATION



$PK_A = 4.2$
 $K_D = 10^{15}$

REVERSIBLE COMPLEX 1.5 UNITS OF PH = OXIDATION BY HYDROLYSIS
CAN TRAP AT PH 8 & CAN RELEASE